

# On the Social Nature of Artifacts

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**Abstract:** Recent work in metaphysics has focused on the nature of artifacts, most accounts of which assume that artifacts depend on the intentions of their individual makers. Artifacts are thus importantly different from institutional kinds, which involve collective intentions. However, recent work in social ontology has yielded renewed focus on the social dimensions of various kinds, including artifacts. As a result, some philosophers have suggested that artifacts have a distinctly social dimension that goes beyond their makers' individual intentions but which stops short of the collective intentionality of institutional kinds. I aim to combine these insights into an account of artifacts that involves disjunctive conditions of mind-dependence: artifacts can *either* depend on the singular intentions of their makers *or* they can depend on the collective acceptance of particular social groups but often they depend on both given their context of creation. I consider five objections to my view, two which argue that the maker's singular intention is always necessary, two which argue that for some artifact kinds collective intentions are always necessary, and one which argues that groups play a more fundamental role than my disjunctive accounts allows.

## 1. Introduction

Philosophy has witnessed a recent surge of interest in the nature of artifacts – human-made things like pencils, electric cars, and picture frames. The standard view of artifacts, both pre-theoretically and in the philosophical literature, is that artifacts depend on the intentions of their individual makers. A carpenter makes a chair out of wood, glue and other materials and *that* very chair is mind-dependent insofar as it depends on the carpenter's intention to make *that kind of thing*.<sup>1</sup> The carpenter had to intend to make a *chair* rather than a nightstand or coffee mug, and the carpenter had to *successfully* execute that intention by doing various things that resulted in a chair. Thus, the chair depends on the carpenter's successfully executed intention to make a specific kind of artifact. Call this view the intention-dependence of artifacts or IDA for short:

*Intention-Dependence of Artifacts (IDA):* For all  $x$  and all artifact kinds  $K$ ,  $x$  is a  $K$  only if, for some agent  $S$ ,  $x$  is the successful product of  $S$ 's intention to make a  $K$ .<sup>2</sup>

IDA reflects what is called the artisan model of artifacts – the view that artifacts are singular, discrete products of an individual artisan working in her studio.<sup>3</sup> The moniker conjures up images of a craftsperson labouring in their workshop to produce a wooden chair or a ceramic jug or leather shoes.

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<sup>1</sup> This view is found in Bloom (1996), Thomasson (2003, 2007), Levinson (2007), Mag Uidhir (2013), Evinne (2016, 2022), and Juvshik (2021a), amongst others. Hilpinen (1992) maintains a central role for maker intentions but talks of type descriptions as the content of those intentions rather than artifact kinds, nonetheless those type descriptions will tend to correspond to artifact kinds.

<sup>2</sup> This formulation largely follows Thomasson (2003, 2007) and in some respects Hilpinen (1992) and Bloom (1996).

<sup>3</sup> I borrow the term 'artisan model' from Houkes and Vermaas (2009) who criticize it on different grounds.

On the artisan model, the artisan's successful singular intention to make a chair, jug, or shoes is the extent of the mind-dependence involved in the existence of these artifacts, thereby offering a necessary, but not sufficient, condition for being a member of an artifact kind.

My aim in this paper is to challenge the extensional adequacy of IDA and the artisan model as a necessary condition for being a member of a particular artifact kind. Recent work in social ontology has yielded renewed focus on the social dimensions of various kinds, including artifacts.<sup>4</sup> As a result, some philosophers have suggested that artifacts have a distinctly social dimension that goes beyond their makers' individual intentions but which stops short of the collective intentionality of institutional kinds.<sup>5</sup> I aim to combine these insights into an account of artifacts that involves disjunctive conditions of mind-dependence: artifacts can *either* depend on the singular intentions of their makers *or* they can depend on the collective acceptance of particular social groups and their concomitant social norms, but most often they depend on both. Which disjunct is satisfied depends on the artifact's context of creation. In short, many artifacts exhibit a social nature which involves dependence on mental states of agents or groups other than the artifact's maker, showing that the artisan model is inapt as a general view of artifact creation. This paper thereby brings together both the artisan model and the disparate accounts of the social nature of artifacts into a unified, disjunctive account of artifact kinds.

The paper is structured as follows. In section 2, I consider three kinds of cases which show how artifacts may involve social dependence in addition to the maker's intention. In section 3, I consider a variety of cases which show that some artifacts depend solely on collective acceptance or social norms without the maker's successful intention because the maker's intention failed. In section 4, I combine these insights into a disjunctive account of artifact mind-dependence. In section 5, I defend my account from five objections, the last of which necessitates an amendment to the disjunctive account, before briefly concluding in section 6.

Before proceeding, I'll note four assumptions I make throughout. First, I adopt a general descriptive methodology which takes a theory of artifacts and artifact kinds to be constrained by our artifact practices and empirical work on artifacts, including from other disciplines such as engineering, anthropology or technology studies. Second, I use the term 'artifact' to refer to everyday artifact kinds like chair and pencil, artworks such as paintings and poems, and technical artifacts of engineering such

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<sup>4</sup> For a survey of the social ontology literature see Ritchie (2015) and Mason (2016).

<sup>5</sup> For accounts of collective intentionality and institutional kinds see Bicchieri (2006), Epstein (2015), Gilbert (2015), Guala (2016), Khalidi (2010, 2015, 2016), Mallon (2016), Ruben (1985), Searle (1995), Sveinsdottir (2013), and Tuomela (2002, 2007). There's a nearby but distinct question about social groups; see e.g. Hawley (2017), Ritchie (2013), and Thomasson (2016).

as particle accelerators and rotary engines.<sup>6</sup> I'm excluding both unintentionally created by-products such as sawdust and anthropogenic climate change, as well as institutional kinds such as parliaments, sports clubs, and marriage contracts.<sup>7</sup>

Third, I assume function essentialism about artifacts is false. IDA only offers a necessary condition on artifact kinds, so makers must further *attempt* to successfully execute their intention.<sup>8</sup> The most common view of what the attempt involves is function essentialism, the view that artifacts are functional objects and artifact kinds are individuated by a shared function, so for makers to be successful they must bestow the relevant function. Since I have argued against this view elsewhere (Juvshik 2021c), I will assume that the alternative, cluster view is correct. The cluster view takes artifact kinds to be determined by a cluster of features which often involves function but may also involve form, material constitution, aesthetic properties, production method or historical or geographic features. For example, chairs are for sitting, typically with legs and back, champagne is an alcoholic beverage but specifically one that comes from the Champagne region of France, Impressionist painting involves a particular brush style and so on. What's important is the denial that (necessarily) all artifacts have a function and that artifact kinds are united by a shared function. On the cluster view, it's possible that *some* artifact kinds are determined by a cluster of features of which *some* are necessary (or at least central) to be that kind of artifact. The geographic origin of champagne, for example, seems necessary to be champagne, even if other features are often intended.<sup>9</sup>

Fourth, while IDA and my subsequent disjunctive account are formulated as offering conditions on artifact kinds, I take them to simultaneously offer *partial* conditions on artifactuality, generally. This is because I assume that to be an artifact necessarily involves being a member of an artifact kind. To be an artifact is to be a chair or a cellphone or satellite or Persian carpet or soufflé or

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<sup>6</sup> There is a use in the literature of 'technical artifacts' which follows Baker (2007, 49) in restricting artifacts and artifact kinds to those that have proper functions, though often this usage seems to track technical complexity rather than functionality. My third assumption rejects function essentialism so I will set the restriction to 'technical artifacts' aside.

<sup>7</sup> This generally follows the literature. For example, Dipert (1993, 33-37) treats by-products as artificial and therefore beyond his account of artifacts proper while Hilpinen (1992) and Thomasson (2007) view by-products as contingently artifactual, thus excluding them from their main accounts of essentially artifactual kinds. Relatedly, I'm assuming 'artifact' is univocal, though by-products and institutional kinds are sometimes called artifacts. See Reydon (2014, 139-140) for discussion of different restrictions on the concept of *artifact* and see Preston (2022) and Güngör (forthcoming) for pluralism about the concept of artifact. Güngör is one of the few authors who explicitly countenance by-products as artifacts and uses such cases to motivate his pluralism.

<sup>8</sup> One can intend without an attempt but attempting entails having the intention to do so. For discussion about intending and attempting in the art case, see Mag Uidhir (2010, 2013) and Xhignesse (2020a).

<sup>9</sup> Function essentialists include Dipert (1993), Baker (2007), Elder (2007, 2014) Kornblith (2007), Grandy (2007), Soavi (2009), Franssen and Kroes (2014), and Eynine (2016). See Preston (2009) for an overview of theories of artifact function. Cluster accounts include Hilpinen (1992) and Thomasson (2003, 2007) and I largely follow Thomasson's version.

Camaro or whatever. There are no ‘bare’ artifacts which don’t belong to a particular artifact kind. A maker can’t merely intend to make an artifact since this wouldn’t yield success conditions for their attempt. While the conditions on artifactuality are not exhausted by the conditions for being a member of a particular artifact kind, there is at least partial overlap because to be an artifact requires being a member of an artifact kind, which in turn involves satisfying the massive disjunction of all artifact kinds.<sup>10</sup> I will consider an objection later that may undercut this assumption, but for now I will assume that there are no bare artifacts.<sup>11</sup>

## 2. The Limits of the Artisan Model

IDA maintains that artifacts depend only on the singular intentions of their makers. However, there are several considerations which show that many artifacts depend not only on the intentions of their makers but also on features of the broader social context, whether that be collective social acceptance, an intention that it be recognized as a member of its kind by other agents or the social norms governing the kind. Thus, here I aim to show the limitations of the artisan model; many artifacts aren’t merely the successful result of a singular artisan’s intention to make that kind of thing. There are three important ways artifacts can be social, as defended by Marcel Scheele, Randall Dipert, and Amie Thomasson, respectively.

First, are cases where the artifact maker’s success depends on the collective acceptance of some social group. Scheele (2006: 29-30) gives the example of the Pieterskerk in Leiden, a gothic church that became a semi-public event hall on the basis of a transfer of ownership and contract changes. Such a change depends on various social institutions and norms (partly because the building wasn’t modified beyond removing the pews), and thus the building’s kind is partly dependent on more than just its maker’s original intention. Scheele (2006: 28-32) also gives the example of a device

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<sup>10</sup> Hilpinen (1992) only talks of artifacts generally and makers intending to bestow a type-description, but I read his types as artifact kinds. By contrast, Bloom (1996) explicitly requires makers to intend to make something of a particular artifact kind by appeal to his causal-historical account, which disallows bare artifacts. Thomasson (2003, 2007) shares Bloom’s intention account but only discusses its application to artifact kinds rather than artifacts generally. However, the prohibition on bare artifacts is taken up explicitly in the art literature with Lopes’ (2014) buck-passing theory of art where to make an artwork is to make a member of an artkind. This is further elaborated by Xhignesse (2020b). Nonetheless, the assumption that there are no bare artifacts is usually taken for granted in the artifact literature. Lowe (2014, 19-20) distinguishes between ontological categories and kinds, identifying *artifact* as belonging to the former and specific *artifact kinds* as belonging to the latter, but he still seems to assume that there are no bare artifacts. Nonetheless, this would be one way of emphasizing that the conditions for artifactuality diverge from the conditions for artifact kinds.

<sup>11</sup> For a survey of the state of the artifact literature see Thomasson (2009) and Koslicki (2018: ch. 8) and for the corresponding debate about artifactual kind terms see Olivero and Carrara (2021).

manufactured for climbers called the figure-eight.<sup>12</sup> It was originally made to be an abseiling device – a device used to protect and transport the climber. However, it also began to be used as a belaying device – a device used to protect your climbing partner (Scheele 2006: 29-30). Both uses function in the same way, by applying friction to the rope. While it was designed as an abseiling device, some manufacturers started marketing it as a combined safety device for abseiling and belaying. Thus, we may ask whether it is an abseiling device or both an abseiling and belaying device. There is debate within the climbing community about the proper use of the device, partly because it is slightly less safe when used for belaying. The device may produce leverage on the carabiner, and if the force generated is applied to the lock of the carabiner it can break. Some climbers take this to be unacceptably risky while others take it to be well within the acceptable margin of error. Nonetheless, the majority of climbers don't care about such a discussion and just follow what others in the community do, and a sizable majority use it as a belaying device. Like the church example, Scheele (2006: 31) takes this to show that it has genuinely become a belaying device by being ascribed such a function by the community of users, manufacturers, and sellers. Its status as a belaying device is dependent on certain social features of our practices and certain collective attitudes of the group of climbers. That is, the Pieterskerk and the figure-eight are of the kinds event hall and belaying device, respectively, in virtue of the acceptance of them as such by the relevant social group.<sup>13</sup>

Second, are cases where the maker intends their creation be recognized as a member of its kind by other agents recognizing that it can perform the function commonly associated with its kind. This sort of social dependence was first recognized by Dipert (1993: 23ff.), who argues that artifacts depend partly on the mental states of others besides the maker: “they require us as agents to think of other cognitive and acting agents, their attitudes and thought and emotional mechanisms, and the contents of their thoughts and attitudes” (1993: 31).<sup>14</sup> Artifact kinds are thereby individuated by the

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<sup>12</sup> Thomasson (2014: 53-4; n9) imagines a similar case where Americans appropriate Chinese chopsticks exclusively as hair ornaments.

<sup>13</sup> Scheele assumes that artifacts can be created by appropriating pre-existing objects without modifying and I share this view. See Eaton (1969), Eynine (2013), Hick (2019), and Juvshik (2021b) on appropriation.

<sup>14</sup> Dipert makes a tripartite distinction between *instruments*, *tools*, and *artifacts proper*. The distinction tracks the different ways humans can use objects: (i) some objects are used as they are found, (ii) some objects are modified to be used for some practical goal, while (iii) still others are modified with the intention that the modification for use for a particular goal be recognized as such. On this definition, artifacts are distinctly ‘social’, since they require that their maker think of other agents when creating the artifact. Dipert’s view has not been widely adopted, but it has inspired Houkes’ and Vermaas’ (2004) action-theoretic account of artifact functions. Simon Eynine (2016: 127 and fn. 10) recognizes certain cases where communal acceptance bestows artifact status, but explicitly rejects Dipert’s ‘extreme claim’ that all artifacts are social in this sense, while Preston (2013) offers a more socially holistic account but eschews talk of ‘artifacts’ in favour of ‘material culture’. For a Marxist-inspired account see Losonsky (1990) and for a Popperian-inspired account see Mansouri and Tayebi (2023).

contents of their maker's intention, and *to be* a member of an artifact kind, such contents must include that the object is to be recognized by others as a member of its intended kind. Dipert calls this their "communicative purpose" (1993: 102), though they will have other, expressive or practical purposes, too. For example, a maker makes a screwdriver by intending it to have various features screwdrivers typically have (e.g. plastic or rubber handle, metal shaft, particularly shaped end to fit certain kinds of screws, sized to be held by hand, etc.) and the maker intends that other agents recognize that it is a *screwdriver* (as well as, say, a slotted screwdriver) by intending that they recognize that it was modified in order to perform the function typically associated with (slotted) screwdrivers.<sup>15</sup> Thus, in addition to intending to bestow various features on their product, makers also intend that their product be recognized as a member of the kind they intend to make. In such cases, the resulting artifact (screwdriver, stepping stone, piano) isn't just dependent on the maker's intention but also on the mental states of other agents, specifically other agents recognizing it as a member of its intended kind.

Third, Thomasson (2014) introduces collective mind-dependence into her account of artifact kinds by showing how artifact kinds can be subject to public norms.<sup>16</sup> Thomasson distinguishes between *public* and *private* artifacts, with the latter adhering to her previous (2003b, 2007) IDA cluster account, which only recognizes the role of individual maker intentions. By contrast, public artifacts are subject to, and dependent on, public norms and the social groups that sustain them, in addition to the maker's intentions. Thomasson's more recent account of public artifacts focuses on a specific kind of intended kind-relevant feature that has hitherto been ignored: what she calls artifacts' "receptive and normative" features, which involve "how the object created is to be regarded, used, treated, or behaved in regard to (and by whom, in what context)" (2014: 47).<sup>17</sup> Since someone can make a poem or tea cozy while intending that it be kept locked away never to be seen by anyone, Thomasson suggests that public artifacts need only be *recognizable* as members of their kind. However, such intended recognisability need not apply to everyone. A mechanical shark movie prop is intended to look like a real shark to movie-goers (Hilpinen's example); the recognisability condition need only apply to an *intended audience*.

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<sup>15</sup> Dipert assumes function essentialism about artifacts.

<sup>16</sup> Thomasson is inspired by Dipert's view but also by the work of Heidegger and Ingarden.

<sup>17</sup> This generally follows Dipert's account of artifacts proper, however, Dipert isn't clear about whether the recognition criterion must *actually* be fulfilled or if the maker must merely have the intention that the object be so recognized. Thomasson reads him as saying that such public artifacts require *actually being recognized as a K* (2014: 50).

A second feature of public artifacts is that the intended features need not be recognitional, but can involve other ways in which the object is to be used, considered or treated.<sup>18</sup> For example, what distinguishes a flag from a piece of cloth are the norms governing the appropriate use or behaviour toward such objects.<sup>19</sup> The former is for some communicative purpose and may be preserved for its ceremonial or cultural value, say, while the latter is for cleaning pots. Using a flag to clean pots violates the norms governing its proper treatment (Thomasson 2014: 51). Similarly, some buildings, such as churches, demand a certain kind of behaviour, while shopping malls are governed by a different set of norms, and even in one building, different norms may apply to different audiences, e.g. adults are to stay in the chapel while children proceed to the basement for Sunday school.<sup>20</sup> Public artifact kinds aren't individuated (merely) by functional or structural features, but also by being intended to be subject to certain norms, where this is for the object to be recognizable by an intended audience as to be treated, regarded, used, in certain ways (2014: 52-53). Thus, "to intend to make a work of art, a cathedral, a cheese sauce, or a top hat, is (inter alia) to intend to make something that is *to be recognized as subject to certain norms of use, treatment, regard, etc.*, by an appropriate (intended) audience" (2014: 53). In such cases, the resulting artifact isn't only dependent on its maker's intention to make an artifact of kind K, but it also depends on the maker's product satisfying the public norms governing artifacts of kind K.

The considerations from Scheele, Dipert, and Thomasson show that many, if not most, artifacts depend not only on the intentions of their makers but also on features of the broader social context, whether that be collective social acceptance, an intention that the artifact be recognized as a member of its intended kind or the social norms governing its kind. This doesn't show that IDA is false per se, only that in many instances there's an added social dimension to artifacts that goes beyond the artisan model. We can call this dependence on both the maker's intention and the social group the social-intentional dependence of artifacts (SIDA for short) and formulate it as follows:

*Social-Intentional Dependence of Artifacts (SIDA):* For some x and all artifact kinds K, x is a K only if, for some agent S and some relevant social group G, x is the successful product of S's intention to make a K and x is accepted as a K by G.

SIDA expresses the condition that some artifacts depend on both the maker's successful intention *and* features of the social context. For simplicity's sake I've formulated it in terms of acceptance as a K by

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<sup>18</sup> Levinson (1979) argues for such a view with his intention-historical account of artworks.

<sup>19</sup> This is Danto's example (1981: 1-2).

<sup>20</sup> Thomasson (2014: 51-52) borrows these examples from Roman Ingarden (1989).

the relevant social group but this will be precisified in section 4. While some particular artifacts may adhere to the artisan model of IDA, the cases above show that many do not.

### 3. Social Dependence without the Artisan Model

In addition to IDA and SIDA I'll now argue that there are cases where the artifact depends *only* on aspects of the social context because the individual maker's intention *failed* and so IDA isn't satisfied. I consider three kinds of cases but they all rely on the same basic idea.

First, consider cases where the maker *rejects* their attempt as successful but some social group or intended audience *accepts* the attempt as successful, thereby bestowing artifact status. For example, imagine a child that gets up to cook pancakes for her family. The result is abysmal and she regards her pancake-attempt as a failure. She had an intention to bestow various pancake-relevant features on her product, but failed to bestow many of them (e.g. she forgot the eggs, she didn't whisk the lumps of flour out, the blueberries were still frozen, the pancakes weren't cooked all the way through, too much salt, etc.). Her intention was to make something that matched the picture at the top of the recipe, but given all of the pancake features that she failed to bestow, her attempt was a failure and she regards it as such. However, her parents laud her attempt as a success (even if not an exemplary one) and eat what was produced. Here, the intended audience (the parents) bestows pancake-status on the child's attempt despite her failure to execute her intention. What's going on in this case is essentially a disagreement between the intended audience and the maker about the threshold between a failed pancake and a bad pancake. The child had an intention with some specific and perhaps narrow content, much of which she didn't bestow on her product, thereby causing her to regard her particular pancake-attempt as a failed pancake. By contrast, the parents' conception of pancakes is broader and they view the threshold of success as easier to attain, thus regarding the child's attempt as a successful, if bad pancake.

This phenomenon is familiar from the artworld. Many artists view some of their works as failures but the artworld public nonetheless accepts their attempts as successful.<sup>21</sup> Georgia O'Keeffe, for example, viewed her early attempts at painting as failures and attempted to destroy the results (in this case a failed-painting), such as her *Red and Green II* (1916) but was unsuccessful in their destruction. Subsequently, the artworld public exhibited these early attempts as successful paintings and indeed views them as crucial to understanding O'Keeffe's later work and her oeuvre as a whole (Lewis 2016).

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<sup>21</sup> This term comes from Danto (1981) and refers to the general group of artists, art theorists, art historians, art critics and reviewers, art sellers and buyers and appreciators, curators and museum and gallery-goers.



Similarly, Coleridge began but never completed his poem *Kubla Khan* because it came to him in an opium-induced dream and upon waking he failed to write it all down before forgetting it and thus all we have is a fragment. Nonetheless, it is now regarded as both an artwork and a poem in its own right, despite Coleridge failing to fully execute his intention.<sup>22</sup> In such cases, despite the maker's intention to make a K having failed, some relevant social group accepts their attempts as successful and thereby bestows K-status on their product. Like the pancake case, O'Keeffe and the artworld have differing conceptions of the threshold between a failed painting and a bad painting. It's worth noting that O'Keeffe and Coleridge failed in two different ways, what Michel Xhignesse (2020a, 906-908) calls conformative and performative failures, respectively. Performative failings involve a failure to perform the action intended to bring about the attempt whereas in conformative failures the action is performed but it fails to bring about the desired result, i.e. it fails to conform to the content of the maker's intention. O'Keeffe applied paint to canvas so was performatively successful but the result failed to conform to her intention. Coleridge failed to perform all of the requisite actions that would bring about a poem. Nonetheless, both O'Keeffe's conformative-painting failure and Coleridge's performative poem-failure were accepted as successful painting and poem attempts, respectively, by the artworld public.

This is in keeping with institutional theories of art, the most well-known of which is George Dickie's (1984) account whereby something counts as art if it's an artifact made by an artist who intends it for presentation as art to an artworld public whose members recognize that it is intended to be presented as art. Different institutional theories cash out the role of the artworld public in different ways, but at base they all recognize the normative authority of the social group of the artworld public in successful artmaking, in particular the attitude they take towards the art-attempt.<sup>23</sup> This isn't restricted to institutional theories of art, since as John Searle argues, "the attitude we take towards a [social] phenomenon is partly constitutive of the phenomenon" (1995, 33). In the case of money, if everyone stopped believing that US dollar-bills were money, then they would cease to be money. I'm not endorsing institutional theories of art as an account of what makes something an artwork, but they do get something right about the constitutive role of the intended audience in art-attempts. This applies to artifacts generally: where the artifact-making is socially situated, the attitude that the relevant social group takes towards the artifact-attempt is partly constitutive of the attempt and thereby may

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<sup>22</sup> See Khan (2012, 84-86) for the history of *Kubla Khan*. Virgil's attitude toward the *Aeneid* is another example. See Mackie (2017).

<sup>23</sup> Other institutional theories of art include Davies (2004), Iseminger (2004), and Abell (2012). See also Matravers (2000) and Lopes (2007) for discussion.

determine whether the attempt was successful even if the attempt failed by the maker's lights.<sup>24</sup> A relevant social group's attitude towards the attempt may determine whether the attempt is successful, even in non-art cases, as with the child's failed pancake-attempt.<sup>25</sup> In such cases, there's disagreement between maker and audience about what features are sufficient to bestow for making a successful K, that is, the composition and priority of K-relevant features may diverge between maker and group. My point is that in some cases the group's conception of the cluster of K-relevant features can take normative priority and as a result the group's attitude towards the attempt is partly constitutive of the attempt's success. This isn't different in principle from cases like Scheele's event hall where both the maker and relevant group regarded the attempt as successful, the cases of failure just involve different attitudes towards the attempt on the part of the maker and relevant group.

Second, are certain cases of teamwork and group artifact making. David Pearce (2016) argues that some forms of artifact making involve a kind of collective intentionality, with Pearce adopting Raimo Tuomela's (2007) distinction between I-mode and we-mode intentionality. The I-mode is the singular intention of a maker in the sense of IDA whereas the we-mode is a group intention where participating agents intend to pursue a mutual goal, believe that all intend to pursue that goal, and that the goal is achieved by the goal subdividing into parts performed by each agent, and each agent intends to achieve the goal by acting jointly via their particular roles in achieving the goal.<sup>26</sup> For example, my partner and I intend to make a cake. We jointly intend to make a cake by each of us undertaking various steps in the cake-making process: he preheats the oven and prepares the frosting while I make the batter, he greases the cake tin and I pour the batter in, I put it in the oven and once baked he applies the frosting, and so on. Both of us are acting in the we-mode of intending to make a cake by intending to jointly make a cake by jointly acting in our respective roles and performing those actions which constitute the goal of making a cake.

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<sup>24</sup> This draws out the close connection between art and artifacts, generally, and indeed I'm assuming that all artworks are artifacts. For discussion of the denial that all artworks are artifacts see Weitz (1956), Davies (1991) and Juvshik (2021b) and see Bahr (2019) for the relation between the two.

<sup>25</sup> In both the art and non-art cases I am assuming that function essentialism is false, i.e. many artworks do not have a function and art kinds like painting are not unified by a shared function and the same goes for non-art artifacts, e.g. doodles, sandcastles, a pyramid of stuffed animals made by a child, and other results of play, leisure, or boredom may not have functions, while kinds like chair or boat may not be unified by a shared function since some instances may only be for show. See Juvshik (2021c) for discussion of these and further examples.

<sup>26</sup> I didn't specify a particular view of collective intentionality when discussing SIDA, but Scheele (2006: 26) explicitly adopts Searle's (1995) account of we-intending while Thomasson (2014: 55; n10) remains neutral, and Dipert's account doesn't require *collective* intentionality. Nonetheless, Tuomela's account, and Pearce's use of it, could apply to Scheele's and Thomasson's views. Indeed, part of Pearce's (2016, 5-6) motivation is explicitly to answer what he sees as an implicit challenge in Thomasson's account of public artifacts, namely, how a satisfactory account of collective intentionality could be applicable in those cases.

Pearce is concerned with cases of collective artifact creation that involve teams of cooperating agents (such as cases of mass production of complex technical artifacts)<sup>27</sup> and where an I-mode intention is insufficient to explain the intentions in the making process. Crucially, both individual and collective intentions can be operative at different levels. Pearce (2016, 14-15) gives the example of Honda Motor Company's form of meeting known as *waigaya* which involves a number of stakeholders in different positions meeting to discuss a particular design problem.<sup>28</sup> *Waigaya* exhibits a 'flat' hierarchical structure: everyone participating in *waigaya* has equal weight in their opinions and any ideas generated become the property of Honda. At the end of *waigaya* a set of corporate decisions and action plans have been established with a precise list of assignments for each subpart. Nonetheless, any action plan will underdetermine some features of the end goal and the individual steps for attaining it. In such cases, individual agents can either operate in the I-mode or the we-mode but not both. However, Pearce argues that "the example of Honda shows how 'higher-level' collectivity (group agency and we-mode intentionality) is compatible with individual attitudes at the lower level, where nonconformism is rewarded." (2016, 23) This is because in cases of teamwork to make a particular artifact kind K, there may not be a unified conception of what Ks involve or require, e.g. not all beliefs about Ks are mutually held by all members of the group (we-)intending to make a K in a unified way (ibid., 16-18). In many cases, a coherent conception of Ks may emerge at the level of the we-mode even if individuals have differing conceptions of Ks in the I-mode. However, because different steps are assigned to individual members of the group as part of making a K, individual agents can operate in the I-mode when undertaking their assigned step with their actions being guided by their individual conception of Ks, which may differ from that of the group. Because there may be disagreements about the nature of Ks between the I-mode and the we-mode, particular agents may fail to execute an I-mode intention during their assigned role in the joint action plan, but the group in the we-mode may accept it as successfully having made a K (or part thereof) on the group conception of Ks.

Cases of I-mode failure with we-mode success can occur in similar ways as the art cases. For example, an I-mode designer intends to make a K with features  $k_1$ - $k_3$  but the other members of the team take Ks to involve features  $k_4$ - $k_7$ . The designer (or producer or manufacturer) fails to make a design plan that successfully incorporates some or all of  $k_1$ - $k_3$  but which does include features  $k_4$ - $k_7$ . As a result, the group, operating in the we-mode, accept the designer's intention to make a K (or

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<sup>27</sup> There are a variety of metaphysical problems with mass production. For discussion see Evnine (2016, 97-103; 2019), Koslicki (2018, 234-235), and Paek (2023).

<sup>28</sup> Pearce relies on Rothfeder's (2014) work on *waigaya*.

specifically a design plan for a K) as successful because it meets the group conception of Ks even though the designer, operating in the I-mode, failed to make a design plan that satisfied their conception of Ks. This is more likely in cases of prototypes where a maker intends to make a new artifact kind, say a gizmo, and her conception of gizmos involve features  $g_1$ - $g_5$ . She fails to bestow all but  $g_5$  on her product and thereby views her intention to make a gizmo as a failure. However, she did succeed in bestowing features  $g_5$ - $g_8$  on her product and some social group (colleagues, friends, family or teammates) accepts her gizmo-attempt as successful on the understanding that the nature of gizmos involves features  $g_5$ - $g_8$ . There is some overlap in features with her conception of gizmos but because it is a prototype, there are no extant instances to compare the gizmo-attempt with to determine whether it was successful based on a unified, shared conception. Indeed, it's an important feature of prototype cases that what features are essential (or at least central) to the kind are to a certain extent up for debate. Pearce (2016, 23-24) points to this feature of *waigaya* and the possible conflicts between the I-mode and we-mode about the nature of Ks as an important source of design innovation. At base, different conceptions of Ks allow the group to overrule the individual about what constitutes a successful K-attempt. The we-mode doesn't always take precedence but in cases where the group is working for an institution like Honda, the group conception is likely to have more authority, in parallel with the artworld and individual artists (though the latter exhibits less rigid and structured authority than the former).<sup>29</sup> In cases of prototypes, since it in some sense belongs to the inventor (except in *waigaya*), she may have more authority than the group, even though the nature of Ks is still up for debate.<sup>30</sup> Disagreement about the nature of Ks will often be indeterminate and in cases where no agreement may be reached, this may lead to two new artifact kinds (or subkinds) which adhere to the conflicting conceptions of Ks. How often I-mode agents fail but we-mode groups accept their attempt as successful is an empirical matter, but it should be clear that it can and does occur in such group or team contexts.

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<sup>29</sup> In cases of *waigaya*, because every idea belongs to Honda, those in charge are likely to pursue whatever design is most efficient and cost-effective, as well as innovative, whether this leads to one kind or two. In cases of prototypes where the inventor isn't operating as part of an institution (such as the invention of fidget spinners or popsockets), she'll have more authority to determine the nature of Ks than the group, though her conception is still liable to be influenced by group input on what the nature of Ks should be.

<sup>30</sup> There may be debate and compromise between the prototype maker and the relevant social group about what features gizmos (should) have, leading to a unified conception of Ks. Where no compromise or agreement can be reached, we're likely to see the development of two distinct new kinds. The more overlap there is between the I-mode and we-mode conceptions, the more likely they'll be able to come to an agreement on a unified conception of Ks. In cases where the conflict is so strong that no agreement is reached, the group is no longer operating in the we-mode as group agent (Pearce 2016, 23).

Third are cases of what Beth Preston (2009, 217-218) calls *phantom functions*. These are artifacts which are produced and reproduced to perform a particular function which they are physically incapable of performing. Preston gives the example of rosary beads, the beaked plague masks of the seventeenth century, and amulets or charms. Beaked plague masks were made for preventing the spread of the bubonic plague but they cannot physically perform this function yet they were produced in large numbers for this purpose.<sup>31</sup> The first maker of beaked plague masks intended to make something that prevented the spread of disease but failed to do so without knowing it, yet some relevant social group (perhaps the clergy) accepted the attempt as successful on the erroneous belief that it successfully prevented disease and reproduced the masks for this purpose. Over time other features entered the cluster of plague mask features such as form (protruding beak) and material constitution (the beaks contained herbs) as central or essential, thereby changing the conception of the kind beyond the initial maker's narrow functional description as essential to the kind. Preston also gives the example of Laetrile, a drug produced and used in Mexico for treating cancer but which isn't approved for such use in Canada and the United States because there's no scientific evidence that it's effective as a cancer treatment. The ability of such artifacts to perform their functions has been debunked by experts, yet they are still produced and sold for these purposes.<sup>32</sup>

All three cases – maker rejection, group or team making, and phantom functions – at base involve the same issue, namely that the maker fails but the relevant social group accepts the attempt as successful *because* they have different conceptions of the artifact kind in question. As a result, there's *disagreement* between the individual maker and the social group about whether the attempt was sufficient to make a K and in some such cases the collective attitude of the social group has normative force to establish that a K was successfully produced. The cluster view of artifact kinds, whereby an artifact kind K is constituted by a cluster of features relevant to being a K, is able to explain this. Such features are often functional but may also be structural, material, aesthetic, historical, geographical or methodological. Moreover, some of these features will be weighted more heavily than others in terms of their K-relevance. To borrow Thomasson's (2014, 49) example, providing shelter and being made of wood are relevant features to being an A-frame cottage, but the structure of having a sloped roof which starts near the foundation is far more central to the kind. However, different makers may have

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<sup>31</sup> See also Holm (2017) and Parsons (2019) for discussion of phantom functions.

<sup>32</sup> Other examples include many New Age artifacts of the sort sold by Gwyneth Paltrow's company *Goop*, such as jade eggs that she claims help with vaginal cleansing or herb pills to support virility. I'm following Preston in assuming that in these cases the maker believes that her product performs its stated function, though in many New Age cases makers undoubtedly don't believe they work and intend merely to swindle their customers.

slightly different conceptions of the cluster of K-relevant features, as well as the relative centrality of those features. In the case of technical artifact kinds such as the common rail diesel engine, to use Pearce's (2016, 24) example, there is general agreement amongst automotive engineers about what features this involves, although even experts may disagree. In the case of prototypes, the nature of the artifact kind is in flux. Often, the prototype makers have authority to stipulate what features are relevant to the new kind, though sometimes a social group may impose their own conception of the kind which may be taken up by the broader culture or there may be a period of disagreement, compromise, and evolution and innovation of the new kind.<sup>33</sup>

This follows Thomasson's (2003, 599-600) distinction between strict and loose artifact kinds, where technical kinds are far more rigid than generic kinds. For example, the kind chair is far more loose in its cluster of kind-relevant features than rotary engine, stiletto, or intercontinental ballistic missile, with some features of strict kinds being regarded as necessary.<sup>34</sup> There is far more variation between features of individual chairs than there is between individual rotary engines. Moreover, as Levinson argues, art and artkinds are often far more loose in their kind-relevant features than other artifacts. He remarks that "a chair must exhibit shape within a given broadly circumscribed range, with certain shapes, such as that of a javelin, being excluded in advance" (2007, 77) whereas "a sculpture, say, needs to be physical, perceivable, and perhaps smaller than the planet, but apart from that, it can be of any size, any composition, any shape, any color, and any subject." (ibid., 82) Nevertheless, some artkinds, such as Greek Tragedy, are more rigid than sculpture or performance art.<sup>35</sup>

The cluster account allows us to see how differing conceptions of Ks are responsible for the cases above. In the case of the pancake, the child had a specific intention to make a pancake which involved bestowing a particular set of features on the object, many of which they failed to bestow. As a result, the child's attempt failed to conform to their intention and the child regarded their attempt as a failed-pancake. However, the relevant social group, in this case the parents, accepted the attempt as successful because their conception of pancakes wasn't as rigid and specific as their child's. The

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<sup>33</sup> This isn't in tension with Thomasson's (2007, 60-62) view that prototype makers are able to stipulate the features relevant to the kind they invent since this applies to her earlier account of IDA. Thomasson's (2014) later account of public artifacts recognizes that prototypes can be made in social contexts, so presumably the maker couldn't infallibly stipulate the features of the new kind. This is especially clear in institutional contexts like Honda where individual makers have less authority than in IDA cases.

<sup>34</sup> This includes the sloped roof structure of A-frame cottages, the regional origin of champagne, the production method of Persian carpets, the components of a margherita pizza, and the function of clocks.

<sup>35</sup> O'Keeffe's failure was conformative but Coleridge's was performative but the same idea is operating in both: Coleridge had a conception of a poem that he failed to (performatively) complete, yet the fragment he did produce was regarded as sufficiently matching the artworld's conception of a poem to be regarded as a poem in its own right. In terms of maker failure but group acceptance, conformative failure is far more likely than performative failure, especially in non-art cases.

features the child did manage to bestow on the product were sufficient to make a pancake on the parents' conception of pancakes. A similar explanation can be given for O'Keeffe and Coleridge, and cases of teamwork from Pearce: there was a mismatch between the conceptions of paintings, poems, and gizmos (or whatever the kind is in the case of Honda) held by the individual artist or maker and the group, be it the artworld public or the more structured institution of the Honda corporation and in both cases the collective conception dominated. As a result, the group attitude of collective acceptance of success is partly constitutive of the artifact. The case of phantom functions is slightly different. The maker of beaked plague masks presumably takes the function of preventing disease to be central to the kind and initially the social group does so, too. But over time, especially with the discovery that the things produced are physically incapable of performing their function, the centrality of the function shifts, constituting a change in the conception of the kind, with features like beaked form being more central. Of the three cases, phantom functions are the most tendentious. I'll consider two objections to my interpretation of these cases in sections 5.1 and 5.2.

Given the scenarios canvassed above, there is a third possibility, in addition to IDA and SIDA, of particular artifacts depending only on a social group because the maker's individual intention failed. We can call this the social dependence of artifacts (SDA for short):

*Social Dependence of Artifacts (SDA):* For some  $x$  and all artifact kinds  $K$ ,  $x$  is a  $K$  only if, for some agent  $S$  and some relevant social group  $G$ ,  $x$  is the failed product of  $S$ 's intention to make a  $K$  but  $x$  has been accepted as a successful  $K$  by  $G$ .

SDA expresses the possibility that some artifacts don't depend on the *successful* intention to make a  $K$  by some agent since the agent's intention failed but nonetheless are still successful artifacts because some relevant group collectively accepts the attempt as a successful  $K$ -attempt.

#### **4. A Disjunctive Account of Artifact Mind-Dependence**

We've seen three views on the mind-dependence of artifact kinds, namely the artisan model expressed by IDA, and the two kinds of social dependence as expressed by SIDA and SDA. The latter two show that in many cases artifact making involves a distinctly social dimension that hasn't been much appreciated in the literature because of the dominance of the artisan model and that this can occur in four distinct ways:

- (a) Makers intend that the artifact they make be recognized by others as being a  $K$  or as having the function  $F$  (Dipert).

- (b) Makers' creations are subject to existing public norms of creation, use, regard, and treatment (Thomasson).
- (c) Artifact creation and function ascription are determined by, or dependent upon, the collective acceptance of the maker's attempt as successful by a particular audience, community or social group (Scheele).
- (d) Makers' intentions to make a K fail but their attempts are accepted as successful by a particular audience, community or social group.

The different kinds of social dependence in (a) through (d) all generally rely on a kind of collective acceptance by some social group of the maker's success or more generally norms surrounding what counts as successfully making a given kind of artifact.

This kind of acceptance state is what determines the public norms governing artifact kinds. When a group tends to accept an attempt to make a K as successful, that generates and establishes a norm governing Ks. Similarly, when a group treats Ks in a particular way and rebukes other kinds of treatment of Ks as wrong or inappropriate this likewise generates and sustains a norm governing Ks. We can call this the K-norm: the public norm which governs Ks in these myriad ways, including what features are relevant to making Ks. Dipert's condition that makers intend their creation be recognized as a K is ultimately the maker's response to the K-norm. That is, there's an attempt to meet the K-norm that guides the production process. The maker is aware of a norm that Ks possess certain features and function in a particular way and she wants the community of users, makers, appreciators, or buyers to recognize that her attempt was a K-attempt and recognize the K-attempt as successful by accepting it as meeting the K-norm. For example, I'm a potter and own my own shop. I intend to make a bowl for sale so the general public are my intended audience. I intend my creation to be recognized as a bowl and specifically an artisanal glazed bowl. Thus, I intend the bowl to have a certain shape which includes steep sides, a level base, and a cavity or depression for storage, and I make it out of clay and glaze it. I know the proper method of making glazed clay wares and undertake this process to produce one. I intend it to have the function such bowls typically have, to be used as decoration, for holding keys or as salad or fruit bowls, the shape indicative and supportive of that purpose. I also intend it to be regarded as artisanal and thus to be cherished and treated in certain ways, with the hefty price tag reflective of that intention. My customers recognize it for what I intend it to be and thereby accept it as an artisanal glazed bowl. As a result, they know not to use it for compost and they know it isn't single-use and disposable. They recognize it requires certain care and I may include specific



cleaning and maintenance instructions.<sup>36</sup> In this instance, there is a public norm governing ceramic bowls which includes what they're made out of, how they're made, what they're typically for, and how they should be regarded and treated, with the maker attempting to meet it and have that attempt recognized and the customers accepting the creation as having met it. This is also what occurs in cases of (d), but there is disagreement about what it takes to meet the K-norm and the prevailing K-norm of the group takes precedence over the individual maker's conception of the K-norm.

This suggests that there is an order of dependence between (a)-(d) and moreover that the order is reversed. Scheele, Dipert, Thomasson, and myself have all identified different but interrelated ways that artifacts are social. The first step towards social dependence occurs in prototype cases or cases of exaptation (appropriating an existing artifact kind for a new purpose), where makers introduce a new artifact kind along with how it is intended to be treated, used, or regarded. The relevant audience (call them the K-audience) for the prototype will then either accept or reject the maker's attempt as successful (or revise the intended norms of treatment, use and regard), in which case a new norm governing that kind of artifact will be initially established. Once the new artifact kind is accepted and the norms are in place, production expands and makers will internalize the public norm so that it's reflected in their intention. Having passed through (c) and (b), we now arrive at (a), where makers are making an artifact with the intention that it be recognized as such. Cases of (d) may occur at the prototype stage or once the norms are established and makers are attempting to meet them.<sup>37</sup> Fully novel prototypes are relatively rare while the case of maker failure but social success are probably more common, especially in the artworld and teamwork cases. I will therefore focus on social acceptance states and this is why SIDA and SDA are formulated using social acceptance. Such social acceptance states and the social norms they are guided by both partly constitute and govern almost all interactions we have with the built world – they determine how artifacts are to be created, regarded, treated, used, appreciated and we may be subject to sanction or rebuke if we violate these norms, e.g.

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<sup>36</sup> If it lacks the cavity and is instead shaped like a homogenous lump or is made out of Styrofoam instead of clay, they would reject it as satisfying the norm. If they buy it only to use it once and then throw it away, then they've violated the norms of treatment and regard for such bowls. Similarly, if I'm successful at meeting the norm but the buyer uses it as a dog food bowl, then they are violating the norm of use for such artisanal bowls. This violation may be mitigated by various circumstances, such as the fact that they are the owner of the bowl. For an instructive discussion of respecting and disrespecting artifacts, see Saito (2007, ch. 5).

<sup>37</sup> This process is not linear, (a)-(d) can overlap. Moreover, there is a feedback loop with prototypes, where makers adjust their intentions in response to public norms and public norms gradually change in response to makers' intentions. Recognition of this process comes from Ian Hacking (2000) who introduces the term 'feedback loop' in the case of social kinds. See also Khalidi (2010).

if I'm wearing a mask during the pandemic that's only covering my mouth or if I use your pencil to stir my coffee.

Given (a)-(d), we can see that most artifacts are created in a social context and one may be tempted at this point to reject the artisan model altogether and argue that all artifacts depend to some extent on the social. Even cases of the lone artisan in her workshop making a chair for private use is still socially situated because her conception of chairs will be guided by the prevailing chair-norm in her community. I think this is too quick, but we can appeal to a heuristic used to distinguish between institutional and artifactual kinds to emphasize the point: the Robinson Crusoe test. Crusoe is alone on an island and if he can make a K, then Ks aren't an institutional kind because these necessarily involve collective mind-dependence so couldn't be made by a single individual. Crusoe can't make a court of law or a corporation or a marriage contract. However, if Crusoe can make a K, then K is an artifact kind. With respect to IDA and SIDA, the same test can be applied: if Crusoe can make an artifact of kind K, then his artifact satisfies IDA. But Crusoe can seemingly make a chair or a shelter or a hammock by intending to make something that seats a single person, provides protection from the elements, and supports a body horizontally between two trees even though members of these kinds are typically produced in social contexts. Thus, there are in principle cases of artifacts that satisfy IDA even if most satisfy SIDA.

The cases in (a)-(d) clearly support the inclusion of a social condition on artifacts. But the Robinson Crusoe test shows that artifacts can be singularly mind-dependent on the successful intention of their maker as the artisan model purports. This shows that artifacts are interestingly disjunctive in the mind-dependence they exhibit: they can *either* be dependent on individual makers *or* on individual makers and social groups *or* only on social groups. We're now in a position to reformulate the mind-dependence condition on artifact kinds to disjunctively include IDA, SIDA, and SDA:

*Disjunctive Intention-Dependence of Artifacts (DIDA):* For all x and all artifact kinds K, x is a K only if, *either* for some agent S, x is the successful product of S's intention to make a K *or* for some agent S and some relevant social group G, x is the successful product of S's intention to make a K and x is accepted as a K by G *or* for some agent S and some relevant social group G, x is the failed product of S's intention to make a K but x has been accepted as a successful K by G.<sup>38</sup>

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<sup>38</sup> Strictly speaking, there should be necessity operators in front of each disjunct and within the scope of the universal quantifier since if a particular artifact is made which satisfies say, the second disjunct, then that artifact necessarily depends on both the maker's intention and the social group. The dependence relations between artifacts and both the individual maker and the social group involve *rigid historical dependence*. See Thomasson (1999, 30-33).

DIDA says that for any given *individual* artifact, that artifact is either dependent on the intentions of its maker or dependent on the maker's attempt to make that kind of artifact as being accepted as a successful attempt to meet the K-norm by the relevant social group or dependent on the social group accepting the attempt as successful despite the maker's attempt failing. The first disjunct expresses IDA, the second disjunct expresses SIDA and the third disjunct expresses SDA.

Note that a member of *any* artifact kind can (in principle) be made that satisfies any of the three disjuncts, e.g. some fidget spinners could be made that satisfy IDA, while others satisfy SIDA, and some may satisfy SDA. There are no artifact kinds that can *only* be made in Robinson Crusoe scenarios or *only* with collective acceptance and teamwork.<sup>39</sup> Robinson Crusoe cases are in principle possible but they are fringe cases. Cases of SDA are more common, but most artifacts depend on both their individual makers and social groups.

## 5. Objections

I'll now consider five objections to DIDA, the first two of which target the support for SDA while the second two target the *scope* of DIDA by arguing that some artifact kinds can't satisfy IDA. While the latter two objections don't threaten DIDA *per se*, they do suggest that certain artifact kinds can only satisfy its second and third disjuncts, *pace* my earlier claim. The final objection argues that there are cases that aren't covered by any of DIDA's disjuncts and which show that there's a more fundamental role for the social in artifact creation.

### 5.1 Objection: Good K, Bad K, Failed K

The first objection is that many of the cases offered in support of SDA fail to do so because the makers' attempt is merely poor rather than a failure. The child's pancake-attempt, O'Keefe's painting-attempt, Coleridge's poem-attempt, and the cases of teamwork all involve *bad* members of their respective kinds, not *failed* members of the kind. The child made a bad pancake, which is still a pancake, not a failed pancake. The parents are recognizing that it is still a successful pancake even if it isn't a good one. The disagreements between individual maker and social group are about whether it's a good or bad instance of its kind, not whether it's a failed or successful instance of its kind. Understood this

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<sup>39</sup> Both Thomasson's (2014, 54-56) distinction between public and private artifacts and Dipert's (1993, 23ff.) distinction between artifacts proper and instruments or tools also track individual artifacts. A stepping stone can be a private artifact or tool made by a single individual or it can be mass produced and sold at Amazon and thereby be a public artifact or artifact proper.

way, these cases collapse into cases of SIDA – they depend on both the maker’s successful (albeit poor) intention and the acceptance of the social group.

Some cases can be understood in this way. Our distinctions between an excellent K, a good K, a merely functional K, and a bad K are a matter of degree and are often vague and indeterminate, while the difference between a K and a failed K is a difference in kind.<sup>40</sup> Nonetheless, the threshold between a bad K and a failed K is likewise often vague and indeterminate. We can point to clear cases of failed chairs and clear cases of successful chairs, but cases in the middle may be bad or may be failed. This is the result of different conceptions of Ks: different agents often have slightly different and sometimes radically different conceptions of the cluster of K-features and their relative weightings and priority within the cluster. How the disagreement gets decided will vary by both artifact kind, with prototypes often having more leeway than technical artifacts, and social context, with the individual maker’s conception sometimes dominating but other times that of the group takes precedence.

Whether any given case is of a failed K or a bad K will largely depend on the specific content of the maker’s intention, as well as the group’s conception of Ks. Maker testimony is to this extent authoritative with respect to what they were intending to make and the attitude they have towards their attempt. If a maker expresses an attitude that their attempt is a bad K, then that is strong reason to accept that as their attitude towards their product. If a maker expresses an attitude that their attempt is a failed K, then that is strong reason to believe that their attitude towards their product is that it is a failed K.<sup>41</sup> Often times the maker may not articulate their attitude as clearly as that so some amount of interpretation is required, which may form part of the disagreement between the maker and the relevant social group, especially when the maker has a very narrow description of Ks but the group has a broad conception.<sup>42</sup> Whether any given case of a K-attempt is a bad K or a failed K will involve a certain amount of interpretation and will necessarily be influenced by the interpreter’s conception

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<sup>40</sup> See Franssen (2006, 51-53) for discussion of these different judgements.

<sup>41</sup> Hilpinen (1992, 62) includes the condition that individual makers must *accept* their intention as successful by accepting their product as satisfying some type description which makes up the content of their intention. I’m not sure we should endorse such a condition but perhaps it’s acceptable for Robinson Crusoe type cases. However, we should distinguish between a maker accepting their intention as successful and their intention *actually* being successfully executed. It seems possible that makers can be wrong about whether they successfully executed their intention. There’s also the possibility of the converse of Hilpinen’s condition where the maker regards their intention as successful but is overridden by a social group rejecting the intention as successful. This shows that both success and failure can depend on group attitudes.

<sup>42</sup> Artifact kinds exhibit a hierarchical structure, so a maker may intend but fail to make a chair, yet nonetheless make furniture. The narrower the content of the intention, the more likely this is: the child failed to make blueberry pancakes but perhaps succeeded in making food (or the child could fail in making a *blueberry* pancake but succeeded in making a pancake). Likewise Cage may have failed to create a work of music with *4’33* but he succeeded in making an artwork; see Dodd (2018). The higher the level of the kind the maker intends, the easier it will be to succeed e.g. there are more ways to succeed in making a piece of furniture than in making a chair.

of Ks. As a result, some clash of intuitions is to be expected. However, we must leave room for the possibility that makers can fail in their K-attempt but be accepted as succeeding by the group, otherwise we run the risk of maker attempts being infallible insofar as their attempts always produce a K, whether good or bad. While there may be disagreement about any given case, the conceptual possibility is sufficient to support SDA, even if they're fringe cases (like Robinson Crusoe cases), but how frequent they are is to a certain extent an empirical matter.

A related objection argues that the cases from section 3 all involve the maker succeeding in making a K *because* the relevant social group accepted their intention as successfully executed. Acceptance by the relevant social group, in virtue of being partly constitutive of being an artifact of kind K, thereby determines that the maker was successful so cases of SDA are in principle impossible. This is a strong objection but it's important to distinguish between the dependence conditions for the artifact. The objection collapses the distinction between the maker's intention succeeding or failing regardless of the group's attitude, but the dependence base involves different criteria in these two scenarios. Appealing to the difference between I-mode and we-mode intentions may help since they are fundamentally different attitudes from a metaphysical point of view. The objection entails that we-mode success constitutes I-mode success, but this would be an instance of a decomposition fallacy. A group can have a we-mode attitude while individual agents have a different attitude in the I-mode.

For my account of DIDA to succeed I just need conceptual space for failed Ks by the maker's lights but successful Ks by the group's lights. How frequently such cases occur doesn't really matter because my main contention with DIDA is that the *overwhelming majority* of artifacts satisfy SIDA. In an earlier version, DIDA only involved IDA and SIDA as disjuncts, though I'm now convinced that cases of SDA need to be recognized as well. But if one doesn't like my response to the above objections, that just means dropping SDA as a disjunct in DIDA. While I no longer subscribe to this formulation of DIDA, I'm content if others do because (a) it still recognizes the distinctly social aspects of artifact kinds and (b) the overwhelming majority of artifacts satisfy SIDA, though it's also worth noting that in cases of SDA the resulting artifact still counterfactually depends on the individual agent and their intention to make a K, it just doesn't depend on that intention being *successfully* executed as IDA requires, so there's still a central role for individual makers.

### 5.2 Objection: Tacit Commitment to Function Essentialism

A related objection targets phantom functions as support for SDA. The objection can be put in the form of a dilemma: cases of phantom functions either involve a tacit commitment to function

essentialism or the cluster view. If there's a tacit commitment to function essentialism, then the group isn't able to confer success because the product is physically incapable of performing its function, so the group fails as much as the individual maker. If there's a commitment to the cluster view, then the maker can succeed in making a beaked plague mask, say, even if it can't perform the function of preventing the spread of plague because other features like form are also kind-relevant. So if there's a tacit commitment to function essentialism, then the group fails as much as the maker but if we're committed to the cluster view, then the maker succeeds. Either way, phantom functions don't support SDA, though in the latter case they do satisfy SIDA.

I'm committed to the cluster view, so reject any tacit commitment to function essentialism. The cluster view allows for some artifact kinds to be determined by a particular function where this is understood as the function being central (or essential, in some cases) to that kind. Beaked plague masks may be centrally constituted by the function of preventing the spread of plague while also having other kind-relevant features such as a particular form and material constitution. The maker of beaked plague masks intends to bestow this particular function on the thing they create, along with other features such as the beaked structure filled with herbs. If their conception of beaked plague masks includes that function as a central or essential feature, then they may fail to make a beaked plague mask.<sup>43</sup> However the cluster of kind-relevant features can change over time and different agents may have slightly different weightings of features. So a social group's conception of beaked plague masks may not include function as centrally (or as essential) as the individual maker (perhaps form is more important), thereby accepting their creations as successful.<sup>44</sup> This is certainly a conceptual possibility though cases of phantom functions may be fringe scenarios like Robinson Crusoe cases. How common phantom functions are is an empirical question. Certainly not all cases of phantom functions may be understood in this way; the maker may discover that their creations are inefficacious for performing a particular function, but still regard their intention as partially successful since they made something that matches the other intended features such as form and material constitution. While the conceptual possibility is enough, even if this interpretation of phantom functions is rejected

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<sup>43</sup> Alternatively, the maker may not construe function so centrally such that the successful bestowal of a form and material constitution is sufficient to successfully make a (perhaps bad) beaked plague mask.

<sup>44</sup> Kind-relevant features certainly change over time as conceptions of the kind change in response to innovation. As a result, both individual makers and their immediate social group may have failed to make a beaked plague mask if function is central, but subsequent social groups may look back after the kind-relevant features have changed and accept the historical attempts as successful. This may in fact be the case with beaked plague masks where they are still produced today but almost exclusively for cosplaying. See Elder (2014, 33-36) for discussion of such shifts. This raises interesting questions about diachronic and anachronistic collective acceptance states and artifact kind creation (or status conferral) but these are beyond the scope of this paper.

SDA is still supported by the other cases in section 3. However, if one also prefers the objection in section 5.1, then my response is the same: drop SDA as the third disjunct and construe DIDA as the disjunction of IDA and SIDA since this still recognizes the central importance of social dependence.

### 5.3 Objection: Complex Technical Artifacts

A third objection argues that there are some artifact kinds which couldn't be made by Robinson Crusoe or a lone artisan, namely complex technical artifacts like the large hadron collider (LHC), a skyscraper or a nuclear submarine, yet these are paradigm examples of artifacts. However, the reason is not that they're dependent on public norms or require some sort of collective acceptance (although they may) but that they're simply too complex for a single human to make alone. While we think of the paradigmatic artifact maker as the lone craftsman in her workshop, the vast majority of artifacts are mass produced in semi-automated factories or are produced as the result of coordinated efforts by large numbers of agents. Crusoe can't make these kinds of artifacts because no single human agent could produce such things. As a result, for some artifact kinds, SIDA is a necessary condition.

We can respond by disambiguating three senses of the 'maker' of an artifact: the designer, the assembler, and the person who guides assembly by ensuring compliance with the design. Both IDA and DIDA take the designer's intentions to be the focal or central role of 'maker'.<sup>45</sup> In cases with the lone craftsman, they are all three. In cases of mass production, the three typically come apart *and* there may be multiple agents in each role, all coordinating their intentions and actions to make an artifact.<sup>46</sup> Because of the complexity of a skyscraper, different agents are needed to fulfill each of the three maker roles, with all of them coordinating their intentions and attempts to produce the final product. Crusoe is physically unable to design, assemble and oversee such a production, but this is due to cognitive and anatomical limitations, not because there's an absence of public norms or social groups. This is a physical rather than metaphysical limitation; such kinds aren't *essentially* social. We could alter the case so that the island has all the materials Crusoe needs to make a skyscraper, he has vastly greater cognitive capacities than current humans, and he's super long-lived. In such a modified, albeit far-fetched, case, Crusoe could make a skyscraper.

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<sup>45</sup> It's not clear what we should say in cases where the maker's intention failed but the artifact was created in virtue of social acceptance. Intuitively, the agent who attempted but failed to make the artifact is still the 'maker' in the primary or focal sense. Indeed, it seems the relevant social group seems to bestow or confer maker status on the agent by overriding the failed attempt even though the successful intention is absent. Perhaps in these cases there's another sense of 'maker' which is attributable to the social group.

<sup>46</sup> See Juvshik (2021a: 9332-9333) for discussion of these three senses of 'maker'. Pearce's cases of teamwork exemplify these different roles.

#### 5.4 Objection: Status Functions

Another objection also argues that there are some artifact kinds which are essentially social and cannot be made by Robinson Crusoe. These include things like thrones, flags, and uniforms. A throne is a kind of chair that has a particular social function (signifying monarchic authority) and this function requires the throne's maker to think of a particular audience or social group – thrones have a communicative function in Dipert's sense. Flags or military uniforms similarly have a communicative social function of expressing allegiance, identity, or rank which again requires makers to intend their creations be recognized by others as such. As a result, Crusoe couldn't make a throne or a flag or a uniform so for some artifact kinds SIDA is a necessary condition.<sup>47</sup>

How might we respond to this class of counterexamples? First, note that these social functions are what Searle (1995: 40-43) calls *status functions* – functions that an object has but which do not depend on the physical characteristics of the object. Searle gives the example of a ceremonial sword used to signify military rank. There is nothing about the physical make-up of the sword that it communicates the particular social function that it does. Indeed, *any* object could serve to communicate military rank. We just happen to have social norms that give significance to certain artifacts in certain contexts which are then ascribed these various status functions.

I'm inclined to say that such kinds are ambiguous: they can either refer to an artifact kind or they can refer to an institutional kind. When 'throne' is used in the former sense, it refers to a particular chair. When 'throne' is used in the latter sense, it refers to the status function of a particular chair. But only the latter sense is necessarily social, since the bestowal of a status function requires collective intentionality, i.e. we all agree that a throne has this particular communicative function. But the former sense is an artifact that Crusoe can make. Crusoe can make a chair with all the same throne-y features as Queen Elizabeth II's throne except it won't have the status function attributed to thrones. This allows us to maintain that thrones in the *artifact* sense can satisfy DIDA's first disjunct, but it comes at the cost of maintaining that 'throne' is ambiguous with respect to the kind it refers to. This doesn't seem objectionable since there are some kinds with status functions that we do treat as ambiguous. For example, money may refer to either *currency* (institutional kind) or *medium of exchange* (artifact kind). Money in the sense of currency requires collective intentions. If we all stopped believing something was a ten franc coin, it would cease to be a *ten franc* coin, but it wouldn't cease to be a ten franc *coin*.

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<sup>47</sup> Thanks to Cansu Hepçaglayan for raising this second class of counterexamples.



Crusoe can make a coin or bill but he couldn't make yen or francs or dollars. That is, Crusoe can make money in the sense of medium but not money in the sense of currency.<sup>48</sup>

### *5.5 Objection: A More Fundamental Role for Social Groups*

A final objection argues that there are cases not covered by any of DIDA's disjuncts and such cases illustrate a more fundamental role for social groups than DIDA allows. At base, the objection argues that makers' intentions and group acceptance do not need to involve the same artifact kind, regardless of whether the maker's intention is successful. There's conceptual room for cases where the maker either succeeds or fails in making a K but the relevant group accepts it as a K\*. There are also cases where an individual user may appropriate a (failed or successful) K as a K\* and over time this may be accepted by a larger social group as a standard use for Ks or as a new kind K\*. For example, Beth Preston (2003, 604-605) gives the example of beer, which is standardly brewed as a beverage, but which may also be brewed for slug bait.<sup>49</sup> Crawford Elder (2014, 39) gives the examples of artifacts of an outmoded design which are still manufactured today but for a different use, such as large industrial spools which are now coffee tables and old non-electric clothes irons which are now paperweights. Similarly, the history of post-it note adhesive may also be such a case, whereby it was initially intended by Art Fry to be an industrial adhesive but was later appropriated by Fry's colleague Spencer Silver and the R&D department at 3M for its novel use on the back of paper (Petroski 1992, 84-86). Scheele's (2006, 29-30) example of the Pieterskerk being collectively appropriated as a public event hall would be a case where group acceptance of an artifact of one kind creates an artifact of another kind. Finally, Juvshik (2021b) has recently defended artifact creation by appropriation at length and argues that social acceptance of an act of appropriation is often sufficient for that act of appropriation to be successful (ibid. 563-568). Regardless of whether the maker's initial intention succeeded or failed, group acceptance leads to the maker's attempt being appropriated as a member of a different artifact kind from the one originally intended. This in turn suggests that group acceptance may play a more expansive and creative role than DIDA allows since the group acceptance attitude is sufficient in such cases to bestow kind status different from that of what the maker intended.

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<sup>48</sup> Lowe (2014, 20) also makes this point. See also Searle (1995, 32-34) and Khalidi (2015, 100-101).

<sup>49</sup> Preston (2003, 604) also gives the example of old clothes being used as rags, a matchbook as a table leg stabilizer, and an umbrella turned into a lampshade. These are cases of the phenomena of reuse and recycling, which Preston identifies as desiderata for a theory of artifact function (2009, 215-216) which is obviously very closely related to the phenomena of appropriation and exaptation.

This is a powerful objection to the extensional adequacy of DIDA and indeed, if the goal is to capture the social nature of artifacts, then these sorts of cases must be accounted for. As initially formulated, DIDA doesn't appear to countenance such cases since its third disjunct only refers to the *failed* satisfaction of its second disjunct, i.e. group acceptance plays a role only where the group and maker are concerned with a single kind K whereas the cases above involve group acceptance of a different artifact kind K\*. However, note that as stated DIDA doesn't preclude the possibility of artifacts belonging to multiple artifact kinds. If I turn an old metal lampshade upside down and put it on a plinth in the yard, thereby appropriating it as a bird bath, it's arguably both a lampshade and a bird bath.<sup>50</sup> There are clear cases of artifacts belonging to multiple kinds and DIDA at least leaves room for the possibility of a maker making a K, having it accepted as a K but also having it appropriated as a K\*. Nonetheless, given the importance of these sorts of cases in illustrating the role of social groups, we should amend DIDA to capture this sort of social acceptance.

In cases where a maker succeeds in making a K, the social group may either accept it as a K *and* accept it as a K\* or they may only accept it as a K\*. The latter scenario would more closely align with DIDA's third disjunct while the former scenario would seem to parallel the second disjunct. What's needed is an explicit recognition that multiple artifact kinds K and K\* may be involved. In cases where the maker fails to make a K but the group accepts it as a K\* we likewise need to recognize that multiple artifact kinds are involved, but otherwise this seems to be covered by the third disjunct. Thus, all that needs to be added to DIDA to cover these cases is explicit recognition of multiple kinds, which we can do by expanding the scope of the disjunctive condition to cover Ks and K\*s. Call this amended formulation DIDA\*:

*Disjunctive Intention-Dependence of Artifacts\* (DIDA\*)*: For all x and all artifact kinds K, K\* x is a K or a K\* only if, *either* for some agent S, x is the successful product of S's intention to make a K *or* for some agent S and some relevant social group G, x is the successful product of S's intention to make a K and x is accepted as a K or a K\* by G *or* for some agent S and some relevant social group G, x is the failed product of S's intention to make a K but x has been accepted as a successful K or K\* by G.

DIDA\* now explicitly covers cases of kind shift by a social group since the result of group acceptance may be the kind the maker intended *or* it may be a different kind (inclusive). Moreover, this may occur when the maker either succeeds or fails in making a K, since collective acceptance may result in a K

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<sup>50</sup> This example is from Juvshik (2021b, 565). Sometimes our intuitions may not be clear in such cases – is the Pieterskerk *both* an event hall *and* a church or does its appropriation as an event hall override its previous church-status? My first assumption was that our artifact practices and beliefs are a guide to a theory of artifacts. If our intuitions and practices are sometimes fuzzy then we should expect that to be reflected in a theory of artifact kinds.

or  $K^*$  in the second and third disjuncts. This amended formulation captures a more fundamental role for social acceptance than the original DIDA since it now countenances cases where the attitude of the social group is the primary determiner of the artifact kind (though again, it may involve artifacts which fall under both the maker's intended kind and that which is accepted by the group). This is in keeping with the discussion in sections 2 and 3 of the role of group acceptance – it's clear that social groups can play a central role in artifact creation.<sup>51</sup> However, the power of social groups to appropriate artifacts as a new kind ultimately depends upon the *attempt* of individual makers and to that extent is arguably still less fundamental than the role of the individual maker as expressed by the standard artisan model, i.e. individual makers still need to at least attempt to make an artifact of kind  $K$  for a social group to accept or appropriate the result (whether failed or successful) as a  $K$  or a  $K^*$ .<sup>52</sup>

Two residual questions remain about these sorts of cases. First, if a maker  $S$  fails to make a  $K$  but a group  $G$  accepts the attempt as a  $K^*$ , what is it that  $S$  produced? Here we might be tempted to say that  $S$  made a *mere artifact* that doesn't belong to a particular artifact kind but was subsequently appropriated as a  $K^*$ . But my fourth assumption at the outset precludes the possibility of there being 'bare' artifacts that don't belong to an artifact kind. This may seem to beg the question and thereby undermine DIDA, but the assumption that there are no bare artifacts seems to be tacitly widely held in the literature.<sup>53</sup> I don't think we should describe what resulted from  $S$ 's attempt as a mere artifact. Rather, it's straightforwardly a *failed  $K$*  that was subsequently appropriated as a  $K^*$  by  $G$ .<sup>54</sup> Since DIDA already recognizes failed  $K$ s we don't need to add anything about  $S$  producing a mere artifact.<sup>55</sup>

Second, given the possibility of social groups appropriating a maker's  $K$ -attempt as a  $K^*$ , we may naturally ask who the 'maker' of the artifact is. In one sense, we may identify the social group as collectively making the artifact since its status as a  $K^*$  is dependent on their collective acceptance.

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<sup>51</sup> We should also recognize cases where the maker regards their attempt as successful but the group does not. The artworld yields cases here too, such as the reception that Duchamp's works *Fountain* and *Woolworth Bldg* received, as well as Cage's *4'33*. While *Fountain* and *4'33* eventually came to be accepted as artworks, *Woolworth Bldg* did not; see Bonk (1995). This can happen for non-art, too, especially in prototype cases. Since these cases involve *failure* they aren't reflected in DIDA, which offers *success* conditions, nonetheless, they help illustrate the normative power of group acceptance in artifact making.

<sup>52</sup> Nonetheless, collective appropriation may still occur without an individual maker, e.g. a culture collectively appropriates the moon as a time-keeping device. But even in this case there must be an initial agent who has the idea and communicates it to the rest of the culture.

<sup>53</sup> For example, Reydon (2014, 138-139), following Verbeek and Vermaas (2009, 165-166), describes the result as *scrap* rather than as an artifact.

<sup>54</sup> Juvshik (2021a, 9327-9330) is a defense of appropriating failures as members of new kinds, though the focus is on appropriation by individuals rather than groups.

<sup>55</sup> If one is tempted to describe  $S$ 's result as a mere artifact, then DIDA would need to be slightly amended to account for this. The rejection of bare artifacts does require further theoretical defense which I'm unable to do here, hence why it's included as an assumption.

However, in practice, we often seem to identify the initial agent as the maker, even when their attempt failed to produce a K.<sup>56</sup> In keeping with our artifact practices, we can note that ‘maker’ is often ambiguous between the designer, the assembler, and the person who guided assembly in accordance with the design plan, and that in cases of teamwork or collective action, multiple agents may fill these roles, as in the case of *waigaya* discussed earlier.<sup>57</sup> In the post-it note case, both Art Fry and Spencer Silver are described as the ‘inventors’ of post-it notes. Thus, we can say that both the individual agent S and the social group G are in some sense ‘makers’ of the K\*, recognizing that there may sometimes be indeterminacy and ambiguity in attributions of making.

## 6. Conclusion

I’ve argued that individual artifacts may depend on the successful intentions of individual makers or also on the acceptance of a social group and sometimes only on the acceptance of social groups. This feature of artifactuality was formulated in DIDA which expresses a necessary disjunctive condition on artifact kind mind-dependence and was further refined in DIDA\*. This yields a better understanding of what makes something an artifact by recognizing their distinctly social nature and hopefully will help move the literature away from overreliance on the artisan model. The disjunctive account also lays the foundation for a subsequent introduction of artifacts into a broader taxonomy of social kinds especially given that social norms governing artifact kinds and institutional norms may intersect in a single artifact as in the case of money. Clarifying this intersection of artifacts and institutional kinds is work that still needs to be done. We also need a more complete understanding of the social norms governing artifact kinds and the social groups that sustain them. But these are goals for subsequent work. For now, it’s enough to recognize the social nature of artifacts.

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<sup>56</sup> By contrast, when the maker fails to make a K but the attempt is accepted as a K by the group, we attribute the making to the individual maker.

<sup>57</sup> For discussion of different senses of ‘maker’ see Houkes and Vermaas (2004), Thomasson (2007, 66-68), Kornblith (2007, 145-146), Preston (2013), Eynine (2016, 70ff.), Juvshik (2021a, 9332-9333), and Paek (2023).

## References

- Abell, Catharine. "Art: What It Is and Why It Matters" *Philosophy and Phenomenological Research* vol. 85 (2012): 671-691.
- Bahr, Amrei. 2019 "What the *Mona Lisa* and a Screwdriver Have in Common" *Grazer Philosophische Studien* 96: 81-104.
- Baker, Lynn Rudder. 2007 *The Metaphysics of Everyday Life*. Cambridge: Cambridge University Press.
- Bicchieri, Cristina. 2006 *The Grammar of Society: The Nature and Dynamics of Social Norms*. New York: Cambridge University Press.
- Bloom, Paul. 1996 "Intention, History, and Artifact Concepts" *Cognition* 60: 1-29.
- Bonk, Ecke. "Marcel Duchamp: The Woolworth Building as Readymade, January 1916 (An Approximation)" *Grand Street* no. 51 (Winter, 1995): 165-175.
- Danto, Arthur. 1981 *The Transfiguration of the Commonplace*. Cambridge, Mass.: Harvard University Press.
- Davies, David. *Art as Performance*. Oxford: Blackwell Publishing, 2004.
- Davies, Stephen. *Definitions of Art*. Ithaca, NY: Cornell University Press, 1991.
- Dickie, George. *The Art Circle*. New York: Haven, 1984.
- Dipert, Randall R. 1993 *Artifacts, Art Works, and Agency*. Philadelphia: Temple University Press.
- Dodd, Julian. "What 4'33" Is" *Australasian Journal of Philosophy* vol. 96 no. 4 (2018): 629-641.
- Eaton, Marcia. 1969 "Art, Artifacts, and Intentions" *American Philosophical Quarterly* 6(2): 165-169.
- Elder, Crawford L. 2014 "Artifacts and Mind-Independence." In *Artefact Kinds: Ontology and the Human-Made World*, ed. Maarten Franssen et al., 27-43. New York: Springer.
- Elder, Crawford L. 2007 "On the Place of Artifacts in Ontology." In *Creations of the Mind*, ed. Eric Margolis and Stephen Laurence, 33-51. Oxford: Oxford University Press.
- Epstein, Brian. 2015 *The Ant Trap: Rebuilding the Foundations of the Social Sciences*. New York: Oxford University Press.
- Evnine, Simon. 2022 "The Historicity of Artifacts: Use and Counter-Use" *Metaphysics* 5(1): 1-13.
- Evnine, Simon. 2016 *Making Objects and Events*. Oxford: OUP.
- Evnine, Simon. 2019 "Mass Production." In *The Nature of Ordinary Objects*, ed. Cumpa and Brewer, 198-222. Cambridge: CUP.
- Evnine, Simon. 2013 "Ready-Mades: Ontology and Aesthetics" *British Journal of Aesthetics* 53(4): 407-423.
- Franssen, Maarten. 2006 "The Normativity of Artefacts" *Studies in the History and Philosophy of Science* 37: 42-57.
- Franssen, Maarten and Peter Kroes. 2014 "Artefact Kinds, Ontological Criteria and Forms of Mind-Dependence." In *Artefact Kinds: Ontology and the Human-Made World*, ed. Maarten Franssen et al., 63-83. New York: Springer.
- Gilbert, Margaret. 2015 *Joint Commitment: How We Make the Social World*. New York: OUP.
- Grandy, Richard. 2007 "Artifacts: Parts and Principles." In *Creations of the Mind*, ed. Eric Margolis and Stephen Laurence, 18-32. Oxford: Oxford University Press.
- Guala, Francesco. 2016 *Understanding Institutions: The Science and Philosophy of Living Together*. New Jersey: Princeton University Press.
- Güngör, Alper. "Artifact Concept Pluralism" *dialectica, forthcoming*.
- Hacking, Ian. 2000 *The Social Construction of What?* Cambridge, MA: Harvard University Press.
- Hawley, Katherine. 2017 "Social Mereology" *Journal of the American Philosophical Association* 3(4): 395-411.
- Hick, Darren Hudson. 2019 "Using Things as Art" *Grazer Philosophische Studien* 96: 56-80.
- Hilpinen, Risto. 1992 "On Artifacts and Works of Art" *Theoria* 58: 58-82.

- Holm, Sune. 2017 “The Problem of Phantom Functions” *Erkenntnis* 82(1): 233-241.
- Houkes, Wybo and Pieter Vermaas. 2004 “Actions versus Functions: A Plea for an Alternative Metaphysics of Artifacts” *The Monist* 87(1): 52-71.
- Houkes, Wybo and Pieter Vermaas. 2009 “Contemporary Engineering and the Metaphysics of Artefacts: Beyond the Artisan Model” *The Monist* 92(3): 403-419.
- Ingarden, Roman. 1989 *The Ontology of the Work of Art*, trans. Meyer and Goldthwait. Athens, Ohio: Ohio University Press.
- Iseminger, Gary. *The Aesthetic Function of Art*. Ithaca: Cornell University Press, 2004.
- Juvshik, Tim. 2021a “Artifacts and Mind-Dependence” *Synthese* 199(3-4): 9313-9336.
- Juvshik, Tim. 2021b “Artifactualization without Physical Modification” *Res Philosophica*, 98(4): 545-572.
- Juvshik, Tim. 2021c “Function Essentialism about Artifacts” *Philosophical Studies* 178(9): 2943-2964.
- Khalidi, Muhammad. 2010 “Interactive Kinds” *British Journal for the Philosophy of Science* 61: 335-360.
- Khalidi, Muhammad. 2016 “Mind-Dependent Kinds” *Journal of Social Ontology* 2(2): 223-246.
- Khalidi, Muhammad. 2015 “Three Kinds of Social Kinds” *Philosophy and Phenomenological Research* 90(1): 96-112.
- Khan, Jalal Uddin. “Coleridge’s “Kubla Khan”: A New Historicist Study” *Alif: Journal of Comparative Poetics* no. 32 (2012): 78-110.
- Kornblith, Hilary. 2007 “How to Refer to Artifacts.” In *Creations of the Mind*, ed. Eric Margolis and Stephen Laurence, 138-149. Oxford: Oxford University Press.
- Kosliski, Kathrin. 2018 *Form, Matter, Substance*. Oxford: OUP.
- Levinson, Jerrold. 2007 “Artworks as Artifacts.” In *Creations of the Mind*, ed. Eric Margolis and Stephen Laurence, 74-82. Oxford: Oxford University Press.
- Levinson, Jerrold. 1979 “Defining Art Historically” *British Journal of Aesthetics* 19: 232-250.
- Lewis, Danny. “A Painting Georgia O’Keeffe Wanted Destroyed Is on Display for the First Time in Nearly 60 Years.” *Smithsonian Magazine*, 25 May 2016, <https://www.smithsonianmag.com/smart-news/painting-georgia-okeeffe-wanted-destroyed-display-first-time-nearly-60-years-180959229/>. Accessed 24 December 2022.
- Lopes, Dominic McIver. “Art without ‘Art’” *British Journal of Aesthetics* vol. 47 no. 1 (January 2007): 1-15.
- Lopes, Dominic McIver. 2014 *Beyond Art*. Oxford: OUP.
- Losonsky, Michael. 1990 “The Nature of Artifacts” *Philosophy* 65 (251): 81-88.
- Lowe, E. J. 2014 “How Real are Artefacts and Artefact Kinds?” In *Artefact Kinds: Ontology and the Human-Made World*, ed. Maarten Franssen et al., 17-26. New York: Springer.
- Mackie, Chris. “Guide to the Classics: Virgil’s Aeneid” *The Conversation*, October 2017.
- Mag Uidhir, Christy. 2013 *Art and Art-Attempts*. Oxford: OUP.
- Mag Uidhir, Christy. 2010 “Failed Art and Failed Art-Theory” *Australasian Journal of Philosophy* 88(3): 381-400.
- Mallon, Ron. 2016 *The Construction of Human Kinds*. Oxford: OUP.
- Mansouri, Alireza and Emad Tayebi. 2023 “The Metaphysics of Artifacts: A Critical Rationalist Approach” *Journal of Philosophical Investigations* vol. 17 no. 42: 151-167.
- Mason, Rebecca. 2016 “The Metaphysics of Social Kinds” *Philosophy Compass* 11(12): 841-850.
- Matravers, Derek. “The Institutional Theory: A Protean Creature” *British Journal of Aesthetics* vol. 40 (2000): 242-250.
- Olivero, Irene and Massimiliano Carrara. 2021 “On the Semantics of Artifactual Kind Terms” *Philosophy Compass* 16(11): 1-12.
- Paek, Chaeyoung. “Making Things Collectively” *Metaphysics* vol. 6 no. 1 (2023): 1-12.

- Parsons, Glen. 2019 "Phantom Functions and the Evolutionary Theory of Artefact Proper Function" *Grazer Philosophische Studien* 96: 154-170.
- Pearce, David. "Collective Intentionality and the Social Status of Artifactual Kinds" *Design Science* vol. 2 no. 3 (2016): [doi:10.1017/dsj.2016.3](https://doi.org/10.1017/dsj.2016.3).
- Petroski, Henry. 1992 *The Evolution of Useful Things*. New York: Random House.
- Preston, Beth. 2022 "The Artifact Problem: A Category and Its Vicissitudes" *Metaphysics* 5(1): 51-65.
- Preston, Beth. 2003 "Of Marigold Beer: A Reply to Vermaas and Houkes" *British Journal for the Philosophy of Science* vol. 54(4): 601-612.
- Preston, Beth. 2009 "Philosophical Theories of Artifact Function." In *Philosophy of Technology and Engineering Sciences*, ed. Anthonie Meijers, 213-233. Amsterdam: Elsevier.
- Preston, Beth. 2013 *A Philosophy of Material Culture: Action, Function, and Mind*. New York: Routledge.
- Reydon, Thomas A. C. 2014 "Metaphysics and Epistemological Approaches to Developing a Theory of Artifact Kinds." In *Artefact Kinds: Ontology and the Human-Made World*, ed. Maarten Franssen et al., 125-144. New York: Springer.
- Ritchie, Katherine. 2015 "The Metaphysics of Social Groups" *Philosophy Compass* 10(5): 310-321.
- Ritchie, Katherine. 2013 "What Are Groups?" *Philosophical Studies* 166(2): 257-272.
- Rothfeder, Jeffrey. *Driving Honda: Inside the World's Most Innovative Car Company*. New York: Penguin, 2014.
- Ruben, David-Hillel. 1985 *The Metaphysics of the Social World*. London: Routledge and Kegan Paul.
- Saito, Yuriko. *Everyday Aesthetics*. Oxford: OUP, 2007.
- Scheele, Marcel. 2006 "Function and Use of Technical Artefacts: Social Conditions of Function Ascription" *Studies in History and Philosophy of Science* 37: 23-37.
- Searle, John. 1995 *The Construction of Social Reality*. New York: The Free Press.
- Soavi, Marzia. 2009 "Realism and Artifact Kinds." In *Functions in Biological and Artificial Worlds*, eds. Krohs and Kroes, 185-202. Cambridge: MIT Press.
- Sveinsdóttir, Ásta Kristjana. 2013 "The Social Construction of Human Kinds" *Hypatia* 28(4): 716-732.
- Thomasson, Amie. 2007 "Artifacts and Human Concepts." In *Creations of the Mind*, ed. Eric Margolis and Stephen Laurence, 52-73. Oxford: Oxford University Press.
- Thomasson, Amie. 2009 "Artifacts in Metaphysics." In *Philosophy of Technology and Engineering Sciences*, ed. Meijers, 191-212. Holland: Elsevier.
- Thomasson, Amie. 2016 "The Ontology of Social Groups" *Synthese* 196(12): 4829-4845.
- Thomasson, Amie. 2014 "Public Artifacts, Intentions, and Norms." In *Artefact Kinds: Ontology and the Human-Made World*, ed. Maarten Franssen et al., 45-62. New York: Springer.
- Thomasson, Amie. 2003 "Realism and Human Kinds" *Philosophy and Phenomenological Research* 67(3): 580-609.
- Tuomela, Raimo. 2002 *The Philosophy of Social Practices: A Collective Acceptance View*. Cambridge: Cambridge University Press.
- Tuomela, Raimo. 2007 *The Philosophy of Sociality: The Shared Point of View*. New York: Oxford University Press.
- Verbeek, Peter-Paul and Pieter Vermaas. 2009 "Technological Artifacts." In *A Companion to the Philosophy of Technology*, Olsen, Pedersen and Hendricks (eds.), 165-171. Chichester: Wiley-Blackwell.
- Weitz, Morris. "The Role of Theory in Aesthetics" *Journal of Aesthetics and Art Criticism* vol. 15 no. 1 (1956): 27-35.
- Xhignesse, Michel-Antoine. 2020a "Failures of Intention and Failed-Art" *Canadian Journal of Philosophy* 50(7): 905-917.

Xhignesse, Michel-Antoine. 2020b “What Makes a Kind an *Art* Kind?” *British Journal of Aesthetics* vol 60 no. 4: 471-488.